

B2 164. (Amended) A method of ameliorating the symptoms of sepsis comprising directly exposing epithelial cells of the mammal to a protein comprising an amino acid sequence which is at least about 63% conserved in relation to the amino acid sequence identified as SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, or SEQ ID NO:7 and having the ability to induce expression of defensins in epithelial cells.

B3 166. (Amended) A method of prophylactically treating a lipopolysaccharide-induced host inflammatory response in a mammal, which method comprises administering a therapeutically effective amount of an effective amount of a protein to the mammal so as to directly expose epithelial cells of the mammal to the protein, the protein having an amino acid sequence which is at least about 63% conserved in relation to the amino acid sequence identified as SEQ ID NO:4 or identified as SEQ ID NO:5 or identified as SEQ ID NO:6 or identified as SEQ ID NO:7 and having the ability to enhance expression of one or more defensins in bovine epithelial cells.

B4 168. (Amended) A method of enhancing expression of defensins in a mammal in need thereof, by administering an effective amount of a soluble protein to the mammal, the protein having an amino acid sequence which is at least about 63% conserved in relation to the amino acid sequence identified as SEQ ID NO:4 or identified as SEQ ID NO:5 or identified as SEQ ID NO:6 or identified as SEQ ID NO:7 and having the ability enhance expression of defensins in mammalian epithelial cells.

169. (Amended) The method of claim 168 wherein the protein has an amino acid sequence which is at least about 68% or about 71% or about 73% or about 78% or about 83% or about 88% or about 93% or about 98% conserved in relation to the amino acid sequence identified as SEQ ID NO:4.

194. (Amended) The method of claim 159, wherein the mammal is a human and the at least one defensin is a human defensin.

B5 195. (Amended) A method of directly activating B cells using a soluble polypeptide having the amino acid sequence selected from the group consisting of leu-leu-leu-leu-leu-leu-pro-ser (SEQ ID NO:9); leu-leu-leu-leu-leu-leu-pro-leu (SEQ ID NO:10); and leu-leu-leu-leu-leu-leu-val-his (SEQ ID NO:11), and which is specifically recognized by the monoclonal antibody 3C10 and which activates B cells, by administering to a mammal in need thereof an effective amount of said polypeptide.

In accordance with 37 C.F.R. §1.121(c), we enclose separate pages marked "CLAIMS - Version with markings to show changes made" in which all the changes to the claims made relative to the previous version are shown explicitly, inserted passages being indicated by underlined boldface type, deleted passages being in boldface type enclosed in square brackets.

Please add claims 196 to 227:

196. The method of claim 164, further comprising orally administering a said protein to the mammal.

197. The method of claim 160, further comprising exposing the gastrointestinal tract of said mammal to an effective amount of a said compound.

197. The method of claim 160, further comprising exposing the small intestine of the mammal to an effective amount of said compound.

198. The method of claim 194, wherein the at least one defensin is selected from the group consisting of HNP1, HNP2, HNP3, and combinations thereof.

199. The method of claim 159, wherein said compound comprises an amino acid sequence selected from the group of sequences identified as SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6 and SEQ ID NO:7.

200. The method claim 200, wherein the compound is a protein obtained from a mammalian mammary secretion.

201. The method of claim 201, wherein the protein is obtained from bovine milk.

202. The method of claim 202, wherein the protein comprises the amino acid sequence identified as SEQ ID NO:4.

203. The method of claim 196, wherein said protein comprises an amino acid sequence selected from the group of sequences identified as SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6 and SEQ ID NO:7.

204. The method of claim 203, wherein the compound is a protein obtained from a mammalian mammary secretion.

205. The method of claim 204, wherein the protein is obtained from bovine milk.

206. The method of claim 205, wherein the protein comprises the amino acid sequence identified as SEQ ID NO:4.

207. The method of claim 203, further comprising exposing the gastrointestinal tract of said mammal to an effective amount of a said compound.

208. The method of claim 207, wherein the mammal is a human and the at least one defensin is a human defensin.

209. The method of claim 208, wherein the at least one defensin is selected from the group consisting of HNP1, HNP2, HNP3, and combinations thereof.

210. The method of claim 166, wherein said protein comprises an amino acid sequence selected from the group of sequences identified as SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6 and SEQ ID NO:7.

211. The method of claim 210, wherein the compound is a protein obtained from a mammalian mammary secretion.

212. The method of claim 211, wherein the protein is obtained from bovine milk.

213. The method of claim 212, wherein the protein comprises the amino acid sequence identified as SEQ ID NO:4.

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214. The method of claim 210, wherein the mammal is a human the at least one defensin is a human defensin.

215. The method of claim 214, wherein the at least one defensin is selected from the group consisting of HNP1, HNP2, HNP3, and combinations thereof.

216. The method of claim 168, wherein said protein comprises an amino acid sequence selected from the group of sequences identified as SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6 and SEQ ID NO:7.

217. The method of claim 216, wherein the compound is a protein obtained from a mammalian mammary secretion.

218. The method of claim 217, wherein the protein is obtained from bovine milk.

219. The method of claim 218, wherein the protein comprises the amino acid sequence identified as SEQ ID NO:4.

220. The method of claim 216, wherein the mammal is a human and the at least one defensin is a human.

221. The method of claim 220, wherein the at least one defensin is selected from the group consisting of HNP1, HNP2, HNP3, and combinations thereof.

222. A method of stimulating the expression of a defensin in a mammal, the method comprising directly exposing epithelial cells of the mammal to an isolated protein comprising an amino acid sequence selected from the group of amino acid sequences identified as SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, and SEQ ID NO:7.

223. The method of claim 222, wherein the said amino acid sequence is the amino acid sequences identified as SEQ ID NO:4

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